

## IN THE CLAIMS

Please amend the claims to read as follows:

### Listing of Claims

1-40. (Canceled).

41. (New) A transmitting apparatus comprising:

a data forming section that forms first data and second data from data addressed to one of a plurality of receiving apparatuses, the receiving apparatuses being different apparatuses from the transmitting apparatus;

a spreading method setting section that sets (a) a first parameter used for spreading the first data and (b) a second parameter used for spreading the second data independently from each other, when (i) the spread first signal, which is generated by performing spectrum spreading on the first data, is to be transmitted from a first antenna to the one receiving apparatus, (ii) the spread second signal, which is generated by performing spectrum spreading on the second data, is to be transmitted from a second antenna to the one receiving apparatus, and (iii) the first antenna and the second antenna are different from each other;

a first spreading section that generates the spread first signal by performing the spectrum spreading on the first data using the first parameter;

a second spreading section that generates the spread second signal by the performing spectrum spreading on the second data using the second parameter;

a first transmitting section that transmits a first code multiplexed signal from the first antenna to the one receiving apparatus, the first code multiplexed signal being generated by multiplexing the spread first signal and another signal; and

a second transmitting section that transmits a second code multiplexed signal from the second antenna to the one receiving apparatus, the second code multiplexed signal being generated by multiplexing the spread second signal and another signal; wherein:

the first parameter is one of: (x) a spreading factor of the spectrum spreading, (y) how many signals are to be multiplexed to generate the first code multiplexed signal, and (z) how many spreading codes are to be assigned to the each of the receiving apparatuses;

the second parameter is one of: (s) a spreading factor of the spectrum spreading, (t) how many signals are to be multiplexed to generate the second code multiplexed signal, and (u) how many spreading codes are to be assigned to each of the receiving apparatuses.

42. (New) The transmitting apparatus according to claim 41, wherein the spreading method setting section sets (a) the first parameter based on a channel quality between the first antenna and the one receiving apparatus, and not based on a channel quality between the second antenna and the one receiving apparatus, and, (b) the second parameter based on a channel quality between the second antenna and the one receiving apparatus, and not based on a channel quality between the first antenna and the one receiving apparatus.

43. (New) The transmitting apparatus according to claim 41, wherein the spreading method setting section sets (a) the first parameter based on a degree of importance of the first

data, and not based on a degree of importance of the second data, and, (b) the second parameter based on a degree of importance of the second data, and not based on a degree of importance of the first data.

44. (New) The transmitting apparatus according to claim 41, wherein the spreading method setting section sets (a) the first parameter based on how many times the first data has been retransmitted in a form of the first code multiplexed signal, and not based on how many times the second data has been retransmitted in a form of the second code multiplexed signal, and, (b) the second parameter based on how many times the second data has been retransmitted in a form of the second code multiplexed signal and not based on how many times the first data has been retransmitted in a form of the first code multiplexed signal.

45. (New) The transmitting apparatus according to claim 41, wherein the spreading method setting section sets the spreading factor of spectrum spreading as each of the first parameter and the second parameter and the spreading method setting section sets a spreading factor of the first parameter greater than a spreading factor of the second parameter.

46. (New) The transmitting apparatus according to claim 41, wherein the spreading method setting section sets the number of signals which are to be multiplexed to generate the first code multiplexed signal as the first parameter, the number of signals which are to be multiplexed to generate the second code multiplexed signal as the second parameter, and the

number of signals shown by the first parameter is smaller than the number of signals shown by the second parameter.

47. (New) The transmitting apparatus according to claim 41, wherein the spreading method setting section sets the number of spreading codes which are to be assigned to each of the receiving apparatuses as each of the first parameter and the second parameter, and the number of spreading codes shown by the first parameter is greater than the number of spreading codes shown by the second parameter.

48. (New) The transmitting apparatus according to claim 43, wherein the first data comprises control information or retransmission information.

49. (New) The transmitting apparatus according to claim 42, wherein the spreading method setting section performs the setting of the first parameter and the second parameter for only a fixed period of time.

50. (New) The transmitting apparatus according to claim 42, wherein transmission power of the first transmitting section is set greater than transmission power of the second transmitting section.

51. (New) The transmitting apparatus according to claim 47, wherein the spreading method setting section applies the setting of the first parameter and the second parameter to a receiving apparatus having a lower channel quality than a predetermined quality.

52. (New) The transmitting apparatus according to claim 42, wherein the first data comprises a systematic bit when a turbo code is used as an error correction code.

53. (New) The transmitting apparatus according to claim 41, wherein the first code multiplexed signal and the second code multiplexed signal are converted in multicarrier form.

54. (New) A receiving apparatus comprising:  
a first receiving section and a second receiving section that receive spacially multiplexed signals spacially multiplexed through first and second receiving antennas, the spacially multiplexed signals being generated by spacially multiplexing a plurality of code multiplexed signals, each of the code multiplexed signals is generated by multiplexing a plurality of spread signals, and each of the plurality of spread signals is generated by performing spectrum spreading on data;

a separating section that generates a first code multiplexed signal and a second code multiplexed signal by separating the spacially multiplexed signals using a channel estimation matrix, the channel estimation matrix including characteristics of each transmission channel where the multiplexed signals pass;

a first despreading section that despreads at least one of the spread signals in the first code multiplexed signal using a first parameter; and

a second despreading section that despreads at least one of the spread signals in the second code multiplexed signal using a second parameter; wherein:

the first parameter and the second parameter are set independently from each other;

the first parameter is one of: (x) a spreading factor of the spectrum spreading, (y) how many signals are to be multiplexed to generate the first code multiplexed signal, and (z) how many spreading codes are to be assigned to each receiving apparatus; and

the second parameter is one of: (s) a spreading factor of the spectrum spreading, (t) how many signals are to be multiplexed to generate the second code multiplexed signal, and (u) how many spreading codes are to be assigned to each receiving apparatus.

55. (New) The receiving apparatus according to claim 54, wherein (a) the first parameter is set based on a channel quality between the first antenna and the receiving apparatus, and not based on a channel quality between the second antenna and the receiving apparatus, and, (b) the second parameter is set based on a channel quality between the second antenna and the receiving apparatus, and not based on a channel quality between the first antenna and the receiving apparatus.

56. (New) The receiving apparatus according to claim 54, wherein (a) the first parameter is set based on a degree of importance of the data used for generating the first code multiplexed signal, and not based on a degree of importance of the data used for generating the

second code multiplexed signal, and, (b) the second parameter is set based on a degree of importance of the data used for generating the second code multiplexed signal, and not based on a degree of importance of the data used for generating the first code multiplexed signal.

57. (New) The receiving apparatus according to claim 54, wherein (a) the first parameter is set based on how many times same data has been retransmitted in a form of the first code multiplexed signal, and not based on how many times same data has been retransmitted in a form of the second code multiplexed signal, and, (b) the second parameter is set based on how many times same data has been retransmitted in a form of the second code multiplexed signal, and not based on how many times same data has been retransmitted in a form of the first code multiplexed signal.

58. (New) A communication terminal apparatus comprising the transmitting apparatus according to claim 41.

59. (New) A base station apparatus comprising the transmitting apparatus according to claim 41.

60. (New) A radio transmitting method comprising:  
a data forming step of forming first data and second data from data addressed to one of a plurality of receiving apparatuses, the receiving apparatuses being different apparatuses from the transmitting apparatus;

a spreading method setting step of setting (a) a first parameter used for spreading the first data and (b) a second parameter used for spreading the second data independently from each other, when (i) the spread first signal, which is generated by performing spectrum spreading on the first data, is to be transmitted from a first antenna to the one receiving apparatus, (ii) the spread second signal, which is generated by performing spectrum spreading on the second data, is to be transmitted from a second antenna to the one receiving apparatus, and (iii) the first antenna and the second antenna are different from each other;

a first spreading step of generating the spread first signal by performing the spectrum spreading on the first data using the first parameter;

a second spreading step of generating the spread second signal by the performing spectrum spreading on the second data using the second parameter;

a first transmitting step of transmitting a first code multiplexed signal from the first antenna to the one receiving apparatus, the first code multiplexed signal being generated by multiplexing the spread first signal and another signal; and

a second transmitting step of transmitting a second code multiplexed signal from the second antenna to the one receiving apparatus, the second code multiplexed signal being generated by multiplexing the spread second signal and another signal; wherein,

the first parameter is one of: (x) a spreading factor of the spectrum spreading, (y) how many signals are to be multiplexed to generate the first code multiplexed signal, and (z) how many spreading codes are to be assigned to each of the receiving apparatuses;



the second parameter is one of: (s) a spreading factor of the spectrum spreading, (t) how many signals are to be multiplexed to generate the second code multiplexed signal, and (u) how many spreading codes are to be assigned to each of the receiving apparatuses.

61. (New) A radio transmitting system comprising a transmitting apparatus and a plurality of receiving apparatuses, the transmitting apparatus comprising:

a data forming section that forms first data and second data from data addressed to one of the plurality of receiving apparatuses, the receiving apparatuses being different apparatuses from the transmitting apparatus;

a spreading method setting section that sets (a) a first parameter used for spreading the first data and (b) a second parameter used for spreading the second data independently from each other, when (i) the spread first signal, which is generated by performing spectrum spreading on the first data, is to be transmitted from a first antenna to the one receiving apparatus, (ii) the spread second signal, which is generated by performing spectrum spreading on the second data, is to be transmitted from a second antenna to the one receiving apparatus, and (iii) the first antenna and the second antenna are different from each other;

a first spreading section that generates the spread first signal by performing the spectrum spreading on the first data using the first parameter;

a second spreading section that generates the spread second signal by the performing spectrum spreading on the second data using the second parameter;

a first transmitting section that transmits a first code multiplexed signal from the second antenna to the one receiving apparatus, the second code multiplexed signal being generated by multiplexing the spread second signal and another signal; and

a second transmitting section that transmits a second code multiplexed signal from the second antenna to the one receiving apparatus, the second code multiplexed signal being generated by multiplexing the spread second signal and another signal; wherein,

the first parameter is one of: (x) a spreading factor of the spectrum spreading, (y) how many signals are to be multiplexed to generate the first code multiplexed signal, and (z) how many spreading codes are to be assigned to each of the receiving apparatuses;

the second parameter is one of: (s) a spreading factor of the spectrum spreading, (t) how many signals are to be multiplexed to generate the second code multiplexed signal, and (u) how many spreading codes are to be assigned to each of the receiving apparatuses.